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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/868,801 | 06/21/2001 | David Robert Fenn | OC-529 | 5080 |

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PPG INDUSTRIES INC
INTELLECTUAL PROPERTY DEPT
ONE PPG PLACE
PITTSBURGH, PA 15272

EXAMINER

SERGEANT, RABON A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1711

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,801

Applicant(s)

FENN ET AL.

Examiner

Rabon Sergent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-9 and 11-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,2,4,6-9 and 11-13 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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1. Claims 1, 2, 4, 6-9, and 11-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Support has not been provided for the limitations, “wherein the composition comprises no other hydroxyl functional compounds and no reactive diluent having amine groups or blocked amine groups” (claim 1) and “wherein the composition comprises no other hydroxyl functional compounds” (claim 13). Applicants have provided no support within the specification for the recited exclusion of the recited compounds or components. Applicants’ statement that support for the exclusion of other hydroxyl functional compounds exists within the remarks of the amendment, filed January 16, 2001, is entirely without merit. Support must be derived from the specification as originally filed. Furthermore, the language, “the composition containing substantially no reactive diluent which are aldimines, ketimines, or aspartic esters”, set forth within the specification provides neither support nor adequate definition for the far broader language excluding reactive diluents having amine groups or blocked amine groups. Aside from the aforementioned aldimines, ketimines, and aspartic esters, applicants have provided no disclosure that defines what is contemplated by “reactive diluents having amine groups”; for example, there is no way to determine if a simple primary diamine, such as ethylene diamine, or a high molecular weight polyamine is excluded by the language, since it cannot be determined if they constitute a “diluent”.

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2. Claims 1, 2, 4, 6-9, 11, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what constitutes a reactive diluent having amine groups. As aforementioned, applicants have not provided any guidance as to what compounds are encompassed or excluded by this language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 97/30099.

WO 97/30099 discloses the production of liquid coatings, wherein diphenylmethane diisocyanate is reacted with a polyester, corresponding to the instantly claimed polyester containing secondary hydroxyl groups, and a reactive diluent containing amine groups or blocked amine groups. Diphenylmethane diisocyanate is exemplified at line 44 of page 3 and the

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polyester containing secondary hydroxyl groups is set forth at page 6, line 29 through page 7, line 36. The polyester containing secondary hydroxyl groups is derived from the reaction of a polyfunctional carboxylic acid, such as a polyester containing two or more carboxylic acid groups, with a glycidyl ester of a C₂-C₂₀ alkanolic acid. It is noted that the reference in no way requires the use of multiple hydroxyl functional reactants.

5. Though the reference cites other suitable polyisocyanates and other hydroxyl functional compounds, the position is taken that it would have been obvious to select diphenylmethane diisocyanate from the list of specified polyisocyanates, because it is exemplified as being a suitable polyisocyanate for producing the coatings and because of its commercial availability and its accepted widespread utility within polyurethane applications, and that it would have been obvious to select the aforementioned polyester containing secondary hydroxyl groups from the disclosure of hydroxyl functional compounds in view of the disclosed preferred use of such compounds for producing the coatings of the reference. See page 6, line 35 through page 7, line 36. Lastly, despite applicants' remarks, the teachings of the reference are clearly suggestive of two-pack compositions. Given the disclosed concerns about pot-life and the teachings at page 8, lines 1 and 2 that the components can be mixed in any order, one of ordinary skill in the art would have been motivated to formulate the coating as a two-pack system, so as to render the system long-term storage stable. Contrary to applicants' assertions, "two-pack" does not necessarily require the blending of only two components; within the art, "two-pack" is understood to mean that the reactive components, in this case isocyanate-functional components and isocyanate-reactive reactants, are held separate until time of application.

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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent
June 26, 2005


RABON SERGENT
PRIMARY EXAMINER